

### **REMARKS**

This responds to the Office Action dated April 18, 2006, and the references cited therewith.

No claims are amended, no claims are canceled, and no claims are added; as a result, claims 1-25 and 35-50 remain pending in this application.

#### **Examiner Interview Summary**

Applicant gratefully acknowledges the telephone discussion with Examiner Sines and Applicant's attorney David W. Black on July 14, 2006. Discussion topics included the scope of claim 1, Malmqvist (5,965,456) and Bamdad (5,620,850). The Examiner acknowledged that claim 1 is not anticipated by Malmqvist and indicated plans to discuss the application with a supervisor. The Examiner requested that Applicant submit a response without amendment.

Surface plasmon resonance, as referred to by Malmqvist and Bamdad, is discussed in the specification at pages 1 and 2 as well as page 10 of the Amendment and Response dated January 30, 2006. At bottom, the principal of operation of surface plasmon resonance differs from that of the present subject matter.

#### **§112 Rejection of the Claims**

Claims 1-12 were rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Applicant respectfully traverses and submits that the record does not include evidence of an omitted element described as essential. Thus, Applicant submits that claim 1 apprises one of ordinary skill in the art of its scope and therefore, serves the notice function of 35 U.S.C. § 112, second paragraph.

Reconsideration and allowance of claims 1-12 is respectfully requested.

#### **§102 Rejection of the Claims**

Claims 1-11, 13-25, 42, 43 and 45-50 were rejected under 35 U.S.C. § 102(b) as being anticipated by Malmqvist et al. (U.S. 5,965,456 A).

Applicant respectfully traverses the rejection and submits that Malmqvist does not appear to disclose all elements recited in the claims. For example, Applicant is unable to find, in Malmqvist, a disclosure wherein said first wall and said second wall are transparent (as recited in claim 1), a second translucent plate and a first translucent plate (as recited in claim 13) and a chamber means and gap (as recited in claim 42).

Each dependent claim is based on an independent claim believed to be in condition for allowance. As such, and to the extent that each recites additional elements, Applicant believes the dependent claims are also in condition for allowance.

For at least these reasons, Applicant requests reconsideration and allowance of claims 1-11, 13-25, 42, 43 and 45-50.

#### §103 Rejection of the Claims

Claims 35-41 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Malmqvist.

Applicant respectfully traverses and submits that *prima facie* obviousness has not been established. In particular, Applicant is unable to find, in the proposed combination of Malmqvist and the knowledge of one of skill in the art, a teaching or disclosure of all elements recited in independent claim 35. The Office Action asserts that “Malmqvist teaches all of the positively recited structure of the apparatus provided in the claimed method” however Applicant traverses and notes, for example, that Malmqvist appears silent as to a translucent chamber.

In addition, Applicant submits that the motivation for the proposed combination is improper. The Office Action does not appear to set forth cogent reasoning to identify a suggestion or motivation in support of a modification or combination in order to meet the claimed subject matter.

Reconsideration and allowance of claims 35-41 is respectfully requested.

Claims 1-11, 13-17, 20-25, 35-43 and 46-50 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Malmqvist.

Applicant respectfully traverses and submits that *prima facie* obviousness has not been established. In particular, Applicant is unable to find, in the proposed combination of Malmqvist

and the knowledge of one of skill in the art, a teaching or disclosure of all elements recited in independent claims 1, 13, 35, and 42. Surface plasmon resonance, as described by Malmqvist, does not use a gap but instead refers to a metal film. The Office Action asserts that Malmqvist Fig. 1A teaches all recited elements, however at that portion, Applicant finds no clear showing of a gap or channel as recited in the instant claims. Furthermore, Applicant submits that the Office Action reference to glass is insufficient to satisfy the recited claim language.

The Office Action reaches a conclusion of obviousness based, in part, on a reference to “things clearly shown in a patent reference drawing.” Applicant submits that the Malmqvist lacks such a clear showing. For example, it does not follow that a film thickness in one document necessarily provides data upon which to reach a conclusion about a channel dimension of different subject matter. Thus, a conclusion of obviousness is unsupported.

In addition, the Office Action conclusion as to a gap dimension, following a reference to total internal reflection, is unsupported. Indeed, the principal of operation of Malmqvist does not appear to support such a conclusion as to gaps or dimensions thereof.

Applicant is unclear as to the reason for including a duplicate discussion of claims 35-41 in the Office Action. Clarification and a full opportunity with which to respond is respectfully requested.

Applicant is unclear as to the status of claims 18 and 19. The statement of rejection appears to exclude claims 18 and 19, among others, and yet the Office Action discusses these very claims among those rejected. Clarification and a full opportunity with which to respond is respectfully requested.

Reconsideration and allowance of claims 1-11, 13-17, 20-25, 35-43 and 46-50 is respectfully requested.

Claims 12 and 44 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Malmqvist in view of Bamdad et al. (U.S. Pat. No. 5,620,850 A) (hereinafter “Bamdad”).

Applicant respectfully traverses and submits that *prima facie* obviousness has not been established. In particular, Applicant is unable to find, in the proposed combination of Malmqvist and Bamdad, a teaching or disclosure of all elements recited in independent claims 1 and 42, from which claims 12 and 44 are based.

The addition of Bamdad does not appear to cure the shortcomings noted earlier with regard to Malmqvist. In particular, both Malmqvist and Bamdad refer to surface plasmon resonance. Furthermore, the Office Action reference to selection of a known material does not satisfy the burden of setting forth cogent reasoning in support of the selection and combination of Malmqvist and Bamdad in the manner proposed.

Reconsideration and allowance of claims 12 and 44 is respectfully requested.

**CONCLUSION**

Applicant respectfully submits that the claims are in condition for allowance, and notification to that effect is earnestly requested. The Examiner is invited to telephone Applicant's attorney at (612) 373-6911 to facilitate prosecution of this application.

If necessary, please charge any additional fees or credit overpayment to Deposit Account No. 19-0743.


Respectfully submitted,

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Date July 18, 2006

By   
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**CERTIFICATE UNDER 37 CFR 1.8:** The undersigned hereby certifies that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail, in an envelope addressed to: Commissioner of Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on this 18<sup>th</sup> day of July, 2006..

Name

Signature